



CASE REPORT

Idiopathic Isolated (Right) Complete Oculomotor Nerve Palsy Management with Ayurvedic Treatment

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ABSTRACT

Aim: To assess the efficacy of ayurvedic treatment in isolated complete oculomotor nerve palsy by subjective evaluation.

Materials and methods: Prospective interventional case report supplemented by ayurvedic treatment. Using a subjective evaluation, outcome was defined according to patient's perspective based on improvement in eye movement and ptosis. A patient 33-year-old male resident of Delhi running a private business in marketing presented with complaints of not being able to open his right eye along with decreased movements. He was apparently well 2.5 months back, then he developed nausea and vomiting for 1 week and headache (on right half). With these complaints the patient came to Netra Roga outpatient department (OPD) no 15 (ophthalmology) of Shalaky Tantra Department at Ch. Brahm Prakash Ayurved Charak Sansthan. He took treatment for 2 months and got complete remission in his symptoms.

Conclusion: Ayurvedic treatment definitely has a role in chronic disease like different types of palsies especially oculomotor nerve palsy. A case series or pilot study should be conducted in similar cases to validate the above case report, which may prevent or treat many cases of oculomotor palsies.

Keywords: Ayurveda, Ayurvedic treatment, Oculomotor palsy, Ophthalmology, Shalaky Tantra.

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INTRODUCTION

Oculomotor nerve supplies the majority of the muscles controlling eye movements, i.e., four extraocular muscles

(medial rectus, superior rectus, inferior rectus, and inferior oblique) and levator palpebral superioris¹ along with sphincter pupillae and ciliary muscles.²

Disease Review: Oculomotor or third nerve palsy is an eye disease resulting from damage to third cranial nerve or its branches. Therefore, its damage leads to improper movements of the affected eyeball. There are mainly two types of third nerve paresis: Central (sparing pupil) and peripheral (with pupillary involvement).³ As this nerve is also responsible for upper eyelid movement (levator palpebral superioris) and pupillary constriction (sphincter pupillae), its damage makes the affected individual unable to maintain normal alignment of their eyes leading to strabismus (outward and upward rotation of eye), consequent diplopia and loss of pupillary reactions.³ Causes of oculomotor palsy mainly consist of neoplasm, trauma, ischemic lesion, diabetes mellitus, hypertension, aneurysm of carotid artery, infections, and idiopathic.⁴ Incidence of about 25% is found in idiopathic ipsilateral third nerve palsy.⁴ Ischemic vascular lesion is usually characterized by sparing of pupil and if pupil is involved then cause must be other than ischemic vascular lesion. In aneurysm of carotid artery, fixed and dilated pupil is usually characterized by large exotropia, hypotropia.³ Intorsion of eye occurs when patient tries to adduct it because of normal action of superior oblique muscle. After cavernous sinus, oculomotor nerve passes alongside the posterior communicating artery.³ Aneurysm of posterior communicating artery results in compression of third nerve leading to isolated nerve paresis with involvement of pupil.⁵ Painful oculomotor nerve palsy may be due to Tolosa-Hunt syndrome, diabetes, and migraine.⁴ Its management comprises oral and injectable multivitamins along with treatment of the cause.⁶

A male patient 33 years old, resident of Delhi, running a private business in marketing was apparently well 2.5 months back (March 2017), then he developed nausea and vomiting (occasional) and headache (pulsatile, continuous, throbbing pain on right half), which persisted for 1 week. Also he was unable to open his right eye with decreased eye ball movements. He took allopathic medicines (from March 2017 till June 12, 2017) without any improvement. To overcome this agony, patient came to Netra roga OPD no 15 (ophthalmology) of Shalaky Tantra department at Ch. Brahm Prakash Ayurved Charak Sansthan on June 12, 2017. He took treatment for 2 months and got complete remission in his symptoms.

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Purely Vata kapha shamaka treatment was planned for the patient based on pathophysiology of the particular disease. Brihat Vata chintamani rasa,⁷ ekangveer rasa⁸ with Dashamoola Kwatha⁹ were prescribed along with Brahmi Ghrita¹⁰ to facilitate penetration. With this hypothesis, management was initiated for above case.

PAST HISTORY

History of road traffic accident (RTA) almost a year back (March 2016) resulted in minor injury on right side above

the eyebrow. The patient was asymptomatic after the injury and developed above-mentioned complaints in March 2017.

EXAMINATION DETAILS

Details of patient examination at different visits to the hospital are indicated in Table 1.

TREATMENT GIVEN

The treatment provided to the patient is detailed in Table 2.

Table 1: Examination of patient at different visits to the hospital

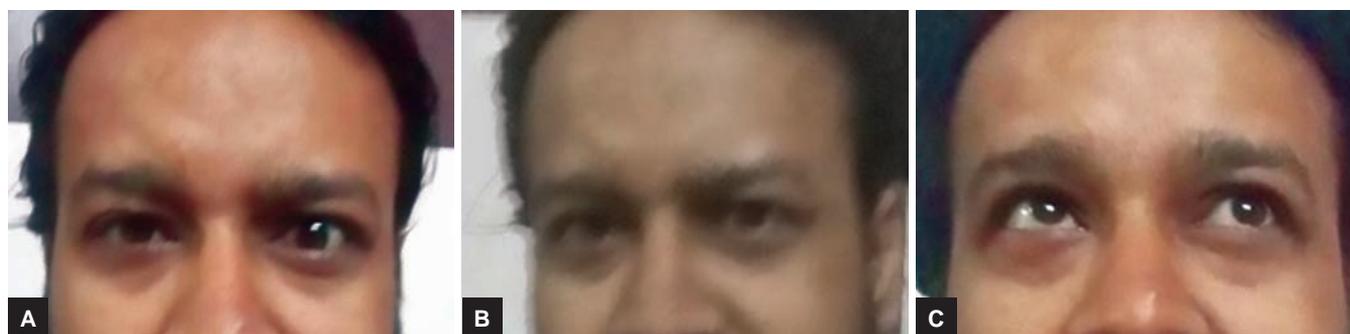
	1st visit (Fig. 1)		After 15 days (Fig. 2)		After 2 months (Fig. 3)	
	Right eye	Left eye	Right eye	Left eye	Right eye	Left eye
Examination	Complete isolated oculomotor palsy	Normal	Very slight movement observed	Normal	Normal	Normal
Deviation	Eye ball was turned down, out and slightly intort	Central gaze	Eye ball was turned down, out and slightly intort	Central gaze	Central gaze	Central gaze
Eye ball movement	Absent	Normal	Slight movement	Normal	Present in eight cardinal positions	Normal
Ptosis	Complete (severe >4 mm)	Absent	Eye ball slightly open (3 mm)	Absent	Absent	Absent
Pupil	Fixed and dilated	Normal	Fixed and dilated	Normal	Normal	Normal
Direct consensual pupillary reaction	Absent	Normal reaction	Absent	Normal reaction	Normal reaction	Normal reaction
Crossed diplopia	Present (on manually raising the eyelids)	Absent	Present (on manually raising the eyelids)	Absent	Still persists (in extreme gazes)	Absent



Figs 1A and B: First visit



Figs 2A to C: After 15 days



Figs 3A to C: After 2 months

Table 2: Conservative treatment prescribed to the patient

Drug	Ingredients	Method of preparation	Dose	Anupana	Duration	Source
Brihat Vata chintamani rasa	Swarna Bhasma, Rajata Bhasma, Abhrak Bhasma, Lauha Bhasma, Praval Bhasma, Mukta Bhasma, Rasa sindura, Juice extract of Kumari	Fine powder of these ingredients is ground with the juice extract of Ghrita kumara made into paste and pills are prepared	125 mg 1 OD	Honey	2 months	Dhootapapeshwar pharmacy (bought by the patient)
Ekangveer rasa	Rasa Sindura, Sh Gandhaka, Kantalauha Bhasma, Vanga Bhasma, Tamra Bhasma, Abhrak Bhasma, Trinakanta Bhasma, Trikatu powder Decoction of Triphala, Nirgundi, Trikatu, Chitraka, Shigru, Kushtha, Arka, Vishamusthi, Datura Juice extract: Bhringraja, Amalaki, Ginger extract	Fine powder of these ingredients is ground with decoction and juice extract for 3 days each and made into paste and pills are made	125 mg 1 BD	Honey	2 months	Chaudhary Brahm Prakash Ayurved Charak Sansthan (CBPACS) hospital dispensary Indian Medicines Pharmaceutical Corporation limited
Brahmi Ghrita	Brahmi juice extract, Cow Ghrita, Trikatu, Vacha, Kushtha, Shankhpushpi	Juice extract of Brahmi is mixed with Ghrita and Kalka of other drugs and is cooked until only Ghrita is left in whole mixture. Now Ghrita is separated from the mixture	2 tea spoon full in morning with 3 hour fasting	Lukewarm Dashamoola Kwatha	5 months	CBPACS hospital Dispensary Indian Medicines Pharmaceutical Corporation limited
Dashamoola Kwatha	Bilva, Agnimantha, Gambhari, Patala, Shyonaka, Brihati, Kantakari, Prishnaparni, Shalaparni, Gokshura	1 part drugs and 16 parts of water is boiled till it remains 1/4th	40 mL BD	–	5 months	CBPACS hospital Dispensary Indian Medicines Pharmaceutical Corporation limited

RESULTS

When the patient came in the OPD his condition looked like Asadhya Avastha (incurable condition) but treatment was started after explaining prognosis to the patient. The only positive aspect was the age of the patient, as there was more chances of regeneration or healing of the damaged nerve in the young. In the second visit, i.e., after 15 days of the Ayurvedic treatment, patient was very enthusiastic and happy as he was able to slightly open his right eye. After 2 months, there was complete resolution

of oculomotor nerve palsy, ptosis was resolved, patient was able to move his eye in all the eight cardinal directions, pupillary reflexes were normal and binocularity was maintained. Complaints of nausea, vomiting and headache were completely resolved.

DISCUSSION

All the causes of isolated oculomotor nerve palsy were not found in the patient except idiopathic. After analysis of the above said condition, the probable pathology

Table 3: Timeline

Year/Month	Incidence/Intervention
March 2016	RTA resulted in minor injury
March 2017	Patient experienced episode of nausea, vomiting for 1 week, headache on right half
March–April 2017	Patient visited different allopathic hospitals like All India Institutes of Medical Sciences, Guru Nanak Eye Hospital but without any improvement. Record of the above treatment was not submitted by the patient
June 12, 2017 (1st visit)	Patient come in OPD of CBPACS, O/E unable to open right eye, decreased movements of right eye Treatment given: Brihat Vata Chintamani 1 × OD Ekanveer Rasa 1 × BD Brahmi Ghrita 2 tea spoon full in the morning Dashamoola Kwatha 40 mL
June 26, 2017	Patient was able to open his eye slightly Same treatment was continued
August 12, 2017	Complete resolution, Ptosis is resolved Patient able to move eye in all eight directions Pupillary reflexes normal Treatment given: Brahmi Ghrita 2 tea spoon full in the morning Dashamoola Kwatha 40 mL For 4 months

was categorized as Ekanga Vata dusti with Avarana of kapha of right eye. Therefore, Vata kapha hara treatment was planned for the patient. Whenever there is increase in sthira, Snigdha and guru guna of kapha, it leads to blockage of circulation, which results in poor nourishment to particular nerve, ultimately causing the palsy of that particular nerve. Brihat Vata chintamani, ekangveer rasa, and Dashamoola Kwatha are specifically given as Vata kapha hara treatment. Brahmi Ghrita was given to enhance drug availability in ocular tissue and to facilitate microcirculation. With this concept, treatment protocol was planned for the particular case.

OUTCOME AND FOLLOW-UP

Patient came to the OPD of CBPACS hospital with chief complaints of dropping of right eye lid, which got resolved completely with ocular movements in all eight directions and normal pupillary reactions. Slight diplopia in extreme gaze was developed, as complete coordinated binocular movements will take time to reestablish. After

completion of 2 months treatment, patient was followed on every 15 days for 6 months. Brihat Vata chintamani rasa and ekangveer rasa were withdrawn after 2 months of treatment and Brahmi Ghrita and Dashamoola Kwatha were advised for further 4 months (Table 3).

CONCLUSION

Ayurvedic treatments definitely have a role in chronic diseases like different types of palsies, especially oculomotor nerve palsy. A case series or pilot study should be conducted in the similar cases to validate the above case report, which may prevent or treat many cases of oculomotor palsies. This case report can also be used to generate hypothesis for cases of strabismus from an Ayurvedic perspective.

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REFERENCES

1. Khurana AK. Comprehensive ophthalmology, 6th ed. New Delhi: Jaypee Brothers Medical Publishers; 2015. p. 336.
2. Agarwal S, Agarwal A. Text book of ophthalmology, Vol 1, section C, Neurophthalmology, 1st ed. New Delhi: Jaypee Brothers Medical Publishers; 2002. p. 327.
3. Agarwal S, Agarwal A. Text book of ophthalmology, Vol 1, section C, Neurophthalmology, 1st ed. New Delhi: Jaypee Brothers Medical Publishers; 2002. p. 332.
4. Khurana AK, Khurana I. Anatomy and physiology of eye, 2nd ed. New Delhi: CBS Publishers and Distributors Pvt Ltd; 2006. p. 458.
5. Agarwal S, Agarwal A. Text book of ophthalmology, Vol 1, section C, Neurophthalmology, 1st ed. New Delhi: Jaypee Brothers Medical Publishers; 2002. p. 333.
6. Agarwal S, Agarwal A. Text book of ophthalmology, Vol 1, section C, Neurophthalmology, 1st ed. New Delhi: Jaypee Brothers Medical Publishers; 2002. p. 33.
7. Shastri AD, editor. Govind Das, Bhaisajya Rantnawali, Vata vyadhi Chikitsa Adhyaya, 26/145-148. Varanasi: Chaukhambha Prakashan; Reprinted 2011. p. 547.
8. Anonymous. Ayurved sarsangraha. Kolkata: Shri Baidyanath Ayurveda Bhavan; 2016. p. 312. Ekanveer rasa.
9. Shastri AD, editor. Govind Das, Bhaisajya Rantnawali, Vata vyadhi Chikitsa Adhyaya, 26/29. Varanasi: Chaukhambha Prakashan; Reprinted 2011. p. 531.
10. Shastri AD, editor. Govind Das, Bhaisajya Rantnawali, Apasmar Chikitsa Adhyaya, 25/35. Varanasi: Chaukhambha Prakashan; Reprinted 2011. p. 524.

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उद्देश्य: व्यक्तिपरक मूल्यांकन द्वारा पृथकरूप से पूर्ण oculomotor तंत्रिका पक्षाघात में आयुर्वेदिक उपचार की प्रभावकारिता का आकलन करना है।

तरीका: आयुर्वेदिक उपचार द्वारा पूरक प्रत्याक्षित हस्तक्षेप मामले की रिपोर्ट। एक व्यक्तिपरक मूल्यांकन का प्रयोग, परिणाम नेत्र आंदोलन और ptosis में सुधार के आधार पर रोगी के नजरिए के अनुसार परिभाषित किया गया था। एक रोगी ३३ साल दिल्ली के निजी कारोबारी पुरुष निवासी कम आंदोलनों के साथ अपनी दाहिनी आंख खोलने में असमर्थ की शिकायतों के साथ प्रस्तुत हुआ। वह दो और आधे महीने पहले तक बिलकुल सामान्य था परन्तु अचानक उसे मतली सिर दर्द (दाईं तरफ) उल्टी एक सप्ताह के लिए विकसित हुए। इन शिकायतों के साथ रोगी चौधरी ब्रह्म प्रकाश आयुर्वेद चरक संस्थान के शालाक्य तंत्र विभाग के नेत्र विज्ञान बहिरंग नं: 15 में आया था। उसने 2 महीने के लिए उपचार लिया और उसके लक्षणों में पूरा आराम दर्ज किया गया।

निष्कर्ष: आयुर्वेदिक उपचार की विशेष रूप से तंत्रिका पक्षाघात के विभिन्न प्रकार की तरह पुरानी बीमारी में भूमिका है। उपरोक्त मामले की रिपोर्ट की वैद्यता सिद्ध करने हेतु केस श्रृंखला या पायलट अध्ययन किया जाना चाहिए जो oculomotor तंत्रिका पक्षाघात रोकने या इलाज कर पाने में सक्षम हों।

